

REMARKS

The above-identified Application has been carefully reviewed with the Office Action of April 30, 2009, the Examiner's comments, and the art references cited therein in mind. In response thereto, Applicants submit the following arguments in support of patentability. Favorable reconsideration is hereby respectfully requested.

As a preliminary matter, Applicants wish to thank the Examiner for the thorough examination of the present application as evidenced in the Office Action dated April 30, 2009. The present Amendment and Response is responsive to the Office Action dated April 30, 2009. Claims 1-9 remain pending with claim 1 being amended and claim 8 being deleted. Claims have been amended as described below in the section entitled "Objections to the Claims" and "Claim rejections under 35 USC §103".

Objections to the Claims

The Office Action has objected to claims 1-9 under 35 U.S.C. § 112 due to various informalities. The Applicants have amended the original claims 1-9 to correct these informalities as directed by the Examiner and the claims are now believed to be in proper form.

Please see the amendments to the claims given above for details.

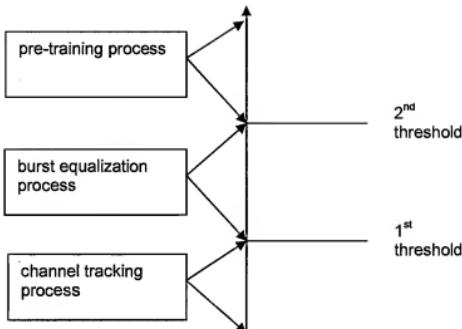
Claim Rejections under 35 USC §103

The Office Action rejected claims 1-2 under 35 USC §103(a) as being anticipated by Sendyk et al (US 5,268,930). For purposes of reconsideration, the Applicants have amended Claim 1 incorporating the features of claim 8, "said first threshold is a critical point when the changing speed of the channel exceeds the tracking speed of the equalizer; said second threshold is a threshold bit error rate corresponding to a receiver". The Applicants respectfully argue the rejected claims after amendments conform to the provisions of 35 USC §103(a).

As per claim 1:

It is indicated in the Office Action that "Sendyk et al do not explicitly disclose two threshold value, i.e., a first and second threshold values. However, in Sendyk et al's system, when the channel experiences deep fading, i.e. exceeding a threshold value, retraining begins. When the channel is free of error, i.e. less than or within the range of the threshold value, the equalization process begins. The Examiner interprets Sendyk et al's equalization process to be performed within two thresholds: zero being the first and Sendyk et al's disclosure of a threshold being the second. The equalization process begins when the error signal is greater than zero and less than the threshold value. Thus Sendyk et al teach entering into an equalization process when channel changes result in an error rate exceeding a first threshold but not exceeding a second threshold and (concludes that therefore), it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify Sendyk et al's decision feedback equalization system including threshold comparator and its corresponding threshold value to explicitly disclose a first threshold value."

Accordingly, the Applicants submit the amendment claim 1 of the present invention, incorporating the features "said first threshold is a critical point when the changing speed of the channel exceeds the tracking speed of the equalizer; said second threshold is a threshold bit error rate corresponding to a receiver", defining the specific meaning of the first and second thresholds, which is not disclosed by Sendyk et al. The scheme of amended claim 1 using the first and second thresholds is indicated in the below figure:



Additionally, it is recited and appreciated in the Office Action that "the features in original claim 8 would be allowable if written in independent form including all of the limitations of the rejected base claim and any intervening claims".

Applicants respectfully submit that Sendyk et al do not teach or suggest the subject matter of specific meaning and application of the first and second threshold. It is obvious that the Sendyk et al device never obtains the motivation of employing the "specific threshold" in amended claim 1's technical scheme to a person having ordinary skill in the art to which said subject matter pertains. Therefore, amended claim 1 of the present invention is non-obvious and conforms to 35 USC §103(a).

As per claims 2-7 and 9:

As stated above, amended independent claim 1 complies with the requirements of non-obviousness. Thus Applicants respectfully submit that dependent claims 3-7 and 9 directly and indirectly citing independent under claim 1, are also in conformity with the provisions of patentability as non-obvious under 35 USC §103(a).

The Applicants believe they have responded to each matter raised by the Examiner.

Allowance of the claims is respectfully solicited. It is believed that the present patent application, after the above amendments and statement of opinions, has overcome all the defects pointed out by the Examiner and is in conformity with the relevant provisions of the Patent Law, so it should be granted patent rights. The Applicants expect early granting of patent right for this application. If there is still a problem that the Examiner believes is not overcome by the above amendments and statement of opinions, please give the Applicants another chance to make amendments and further clarification or explanation or observation.

CONCLUSION

With the amendments presented herein, it is believed that all the claims remaining in the Application are in condition for allowance. Early and favorable action in this regarding is hereby respectfully requested. Should there be any minor informalities remaining, the Examiner is respectfully requested to call the undersigned attorney so that this case may be passed to issue at an early date.

Respectfully submitted,



James W. Kayden
James W. Kayden; Reg. No.: 31,532

THOMAS, KAYDEN,
HORSTEMEYER & RISLEY, L.L.P.
Suite 1500
600 Galleria Parkway N.W.
Atlanta, Georgia 30339
(770) 933-9500